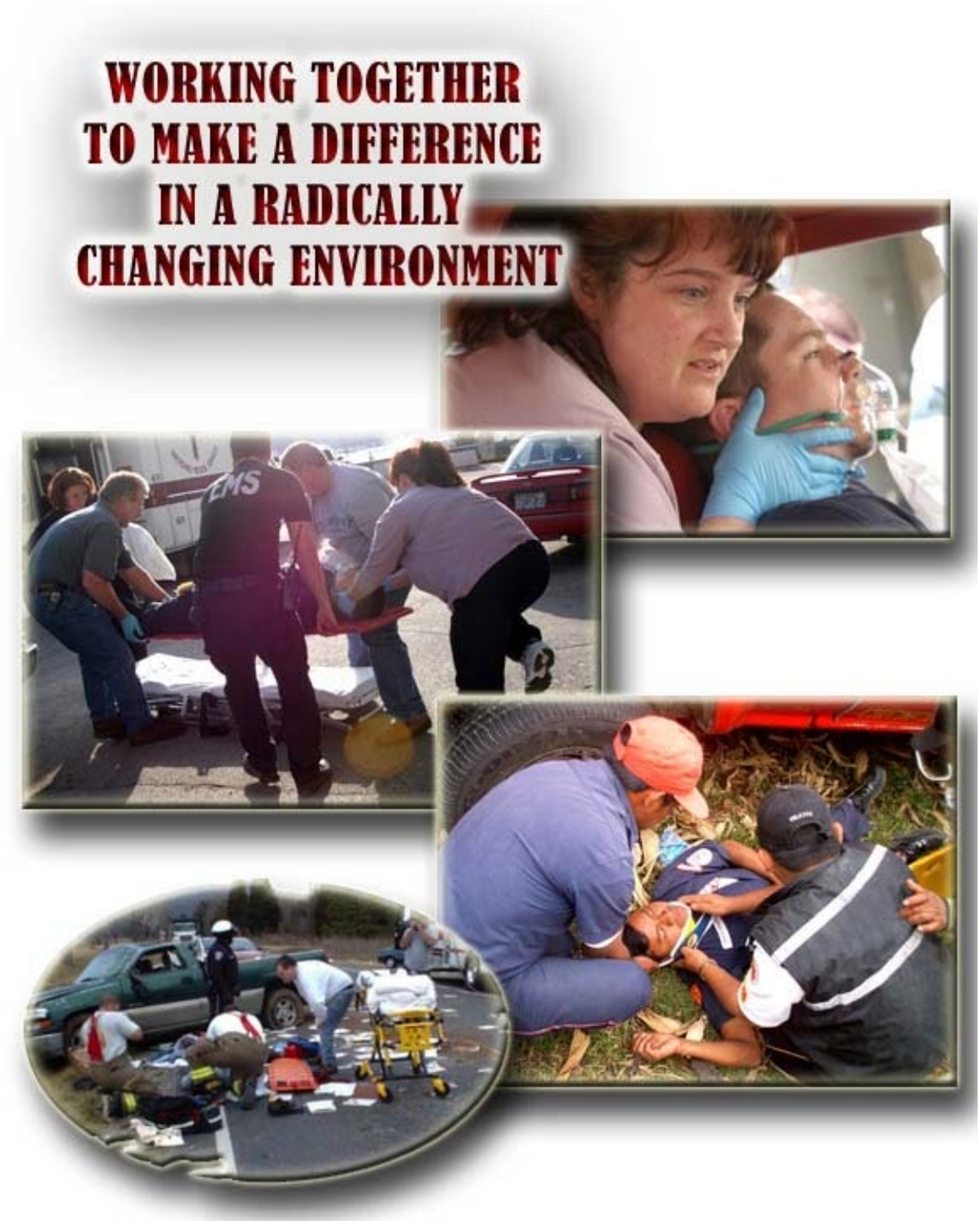

North Central Region EMS & Trauma Care System Plan July 2005 - June 2007

The North Central Region EMS and Trauma Care System Plan
July 2005 - June 2007

I. Executive Summary:

This plan represents the efforts of the North Central Regional EMS & Trauma Care Council, its committees, and Local Councils, agencies, providers and staff to enhance the quality of care within the region, under the authority of RCW 70.168- to design a model trauma care system for the four counties, comprising the North Central Region of the State of Washington.

The North Central Regional EMS & Trauma Care Plan for July 2005 – June 2007 identifies what is currently in place, areas of need and issues, and the direction of the region for the biennium. The overriding goal is to further develop and implement an efficient and effective trauma system, incorporated into the existing EMS prehospital system and healthcare facility network. The system is designed to prevent traumatic injuries, effectively treat EMS patients and rehabilitate trauma patients. The region has made great strides in the further development of collaborative efforts and will strive to enhance those relationships by meeting with various stakeholders to ensure cooperative and coordinated goals are established and accomplished. Through the work of our committees, the Region will continue to review and recommend PCPs, COPs, review and define response areas while furthering the advancement of patient care in the region.

Injury Prevention and Public Education (IPPE)

Many groups and organizations in the North Central Region are involved in injury prevention activities. The Regional Council plays an active role in Injury Prevention. The Council supports injury prevention activities that are carried out in school systems, through trauma centers, by EMS, Fire and Law Enforcement agencies and by other groups.

Two main needs related to injury prevention have been identified. The first need is for increased availability of injury prevention information and education for specific groups. The second need is for a comprehensive injury prevention network in the North Central Region.

Prehospital

The regional prehospital system of care includes telephone access to 911 and prehospital BLS or ALS response, treatment and transport region-wide. Within the North Central Region, there are three communications center that provide 911 service and response. In Grant County, MACC (multi-agency communications center) is the 911 center, in Okanogan County the Sheriff's Department is the 911 center and in Chelan and Douglas Counties, RiverCom is the regional communications center. All three communications centers are staffed with EMD trained dispatchers on a 24/7 basis.
A number of prehospital systems needs and issues have been identified.
Single frequency dispatch is needed to relieve the burden on dispatchers to monitor multiple frequencies, while being more efficient in communicating with responders. Further participation by the MPDs in the development of PCPs and COPs is a need.
Medical oversight and quality assurance is an issue in the rural setting because it is not easily accomplished as providers are not often exposed face to face to the direction of the MPDs. Facilitating that interaction is a need that though identified may not be easily addressed. Recruitment and retention of EMS providers is an ongoing issue within the region, particularly in the more rural areas. The lack of communication and coordination between agencies within the North Central

Region continues to be a concern and greatly contributes to inefficient use of training resources within individual agencies causing a greater reliance on funding from the North Central Region. An additional area of concern is the small number of providers who are actively involved in EMS education. The lack of local or regional data collection systems that could better the MPD QI process by examining data from existing EMS calls on an ongoing basis, creates an environment that makes it difficult to fully evaluate where the EMS system could be improved locally and regionally through training as well as in other areas. Skill maintenance of providers is a regional issue.
Finally, there is a need to define under-served areas in the Region and identify needed resources.

Designated Trauma Care Services
There is a functioning network of designated trauma services in the region that receive and provide trauma care to patients in the region.

There are several trauma service issues. The lack of reimbursement through the supplemental trauma reimbursement program in the last biennium and the changes to the Washington State Indigent Program has had an ongoing devastating effect on trauma facilities throughout the state and within this region. Many rural and wilderness areas have difficulty recruiting physicians and/or physicians' assistants to their small communities. Additionally, there is a need for strong physician leadership in the trauma service network.

EMS and Trauma System Evaluation
Prehospital quality improvement (QI) takes place at the individual agency level and through the county MPD. Designated trauma facilities collect and submit trauma patient data to the State and have QI processes in place in their respective hospitals. The trauma facilities lead regional system QI.

It has been identified that missing and/or incomplete data is a common occurrence when hospitals receive EMS agencies run sheets. Further, no organized regional hospital effort has been made to date to seek run data from providers or from the communication centers in the region. Strong physician leadership of QI is needed for regional system guidance.

All Hazards Preparedness
With the current emphasis and importance of All Hazard/Bioterrorism Preparedness and Response, it is imperative that the Regional Council, healthcare facilities, emergency management, public health and others within the region work closely to prioritize the needs of all entities and to further assessing the issues and needs in this area.

Within the North Central Region there is a dire need for hospital-to-hospital radio communication capabilities. In the event of a multi-casualty incident that stresses the capabilities of any given hospital, it is imperative that communications can be "broadcast" regionally to alert hospitals that they may be called upon to assist in receiving patients either directly from the scene or in a facility-to-facility transfer.

The Regional Council has identified many areas where issues and needs are evident and during this planning cycle and has taken on a very proactive approach.

Goals to be addressed during 2005-2007

North Central Region EMS & Trauma Care Council is the recognized leader that effectively collaborates and coordinates system functions and planning with the regional emergency response partners.

Residents of North Central Region have access to injury prevention information and education with a special emphasis on county needs**.**

A comprehensive regional Injury Prevention network is operating in the North Central region.

An integrated emergency medical communications system exists for the North Central Region.

- **T**he MPDs within the North Central Region EMS & Trauma Care Council are active in the development of system improvement by participating in PCP and COP review, development and implementation. EMS providers in the rural settings have multiple opportunities to interface with their respective MPDs.
- **A**gencies within the North Central Region have adequate personnel to provide service within their boundaries
- **M**aximize the efficiency of training funds throughout the region.
- **T**he North Central Region's PCPs & COPs are current, credible and are based on data that supports the efficacy of them
- **A** system of designated trauma care services, and trauma rehabilitation services meets the North Central Region's the trauma patient care needs
- **T**he region has adequate, reliable and accurate data in order to make system adjustments to improve EMS response and care

Areas under-served for prehospital care and resource needs are clearly defined.

System evaluation and quality improvement analysis is accurately achieved through an active regional prehospital QA/QI program

The North Central Region EMS response, to any MCI (multi-casualty incident) whether man made or natural, is preplanned and coordinated with those agencies that are also responders or are coordinators of those types of events

- **A** hospital-to-hospital radio communication system exists that can reliably be use to alert the hospitals in the North Central Region of a need for inter-facility assistance or support.

It is the vision of the Regional Council that identified issues and needs will be addressed and through agency, provider, hospital, and DOH assistance these areas can become strengths

There are no proposed changes to minimum/maximum numbers of prehospital services or designated services. There are no proposed higher than state standards and no changes to PCPs.

II. Authority – Regional System Coordination

A. Regional Council Coordination

1. System Status

The North Central Region EMS & Trauma Care Council's role in coordination within the EMS & Trauma Care System is one of leadership and networking. The Council provides leadership to the Local Councils by setting regional direction and assisting in regional plan development, PCP/COP review and revision, policy recommendation, MPD assistance and interface, and system assessment.

The Regional Council's business structure is a 501(c) 3 corporation. The board consists of a balance of members representing prehospital, hospital, Local Government, Medical Program Directors, Air Medical, Tribal Official, Law Enforcement, Local Public Health Emergency Management, Communications and Consumer Representatives. The Regional Council meets bi-monthly at the Level II hospital in the region.

The Regional Council maintains an office and staff that are responsible for the day-to-day operations of the Council. The North Central Region EMS & Trauma Care Council has developed a regional training network that not only provides BLS OTEP training, but also direction and assistance in various additional training opportunities.

The Administrator for the North Central Region EMS & Trauma Care Council acts as the liaison for the council while networking with regional hospitals, regional EMS agencies, PSAPs, public health, regional homeland security and emergency management agencies and providers to address the goals, objectives and strategies of the North Central Region EMS & Trauma Care Council.

The North Central Region EMS & Trauma Care Council's Training Coordinator is tasked with establishing the goals, objectives and strategies for our training network as described in this planning document.

The North Central Region EMS & Trauma Care Council's Injury Prevention and Public Education coordinator has developed an IPPE network that is tasked with furthering the goals, objectives and strategies described within this plan.

The North Central Region EMS & Trauma Care Council office staff act as liaisons to the Council providing leadership and direction at various meetings with in the region.

North Central Regional EMS/Trauma Care Council Mission Statement is to:

Ensure the highest quality patient care possible through regional policy direction, injury prevention education, resource assistance and educational support, while furthering the goals of the Washington State EMS and Trauma Care System.

RCW 70.168.015(7) Established the authority for system planning and plan development as well as the inclusive relationship of the regional plans to the State EMS and Trauma Care System Plan. **RCW 70.168.15(8)** established the authority for EMS/TC planning and service regions under which system planning and development occur **RCW 70.168.100(2) and WAC 246-976-960** established the role of the Regional EMS/TC Councils in submitting regional EMS/TC system plans to the Department.

2. Need Statement:

The Regional Council needs to continue to function in a leadership role in the region to further EMS and trauma system evolution at all levels. A strong liaison role with system participants is needed to facilitate relationship development across disciplines and bring people together to look at the whole system when planning for any of its parts. Due to the continuing emphasis on emergency preparedness and the importance of Emergency Medical Services response in that preparedness equation, the region has identified the need to coordinate EMS system preparedness functions and planning with numerous planning partners. These partners include hospitals, public health, emergency management, law enforcement and fire services. The coordination of planning activities is essential in determining that all disciplines are represented, recognized and an integral part of the process.

3. Goals:

Goal 1:

North Central Region EMS & Trauma Care Council is an effective leader that collaborates and coordinates system functions and planning with system participants including the regional emergency response partners.

Objective 1:

Continue Regional Council representation and participation in groups that impact the EMS and Trauma Care System in the region during 2005-2007 and tract involvement.

Strategy 1: Hold meetings necessary to bring people together to discuss regional system issues and develop strategies to address them

Strategy 2: Participate in groups and meetings that impact the regional system and provide information about the system to guide sound decision-making.

Objective 2:

Interface on a regular basis, at least semi-annually, with the following emergency response partners; hospitals, public health, emergency management, law enforcement and fire services, by attending regular meetings. Where there are no currently organized meetings that appropriately allow for this interface begin process to establish meeting opportunities.

Strategy 1: *Attend the Region 7 Hospital Emergency Preparedness meetings to encourage collaborative planning coordination between the North Central Region's designated healthcare facilities.*

Strategy 2: *Attend the Region 7 Local Health Jurisdiction meetings to encourage collaborative planning coordination between the North Central Region's public health agencies.*

Strategy 3: *Attend the Region 7 Homeland Security Council conference meetings, and the North Central EMS Region's various county emergency management council meetings to encourage collaborative planning coordination between the North Central Region and the Region's Emergency Management/Homeland Security departments.*

Strategy 4: *Determine which fire service meetings would be appropriate to attend to address the planning coordination needs of the North Central Region EMS & Trauma Care Council.*
Strategy 5: *Report meeting attendance and relevance to the council and DOH.*

Objective 3: Identify methods that will provide information on system costs by November 2006 and incorporate estimated system cost in the 2007-2009 biennial plan**.**

Projected costs:

- **Estimated system costs:** Indeterminable
- **Regional Council cost:** $30,000.00 –overhead for attending or conducting meetings

Critical Barriers: None at this time

III. Injury prevention & public information/education

A. IPPE

System Status

Table A. Regional Injury Data and Injury Data by County:

Regional Non fatal injuries 1998-2002	Regional Fatal injuries 1998-2002
1. Falls: 3276	1. MVT-occupant: 222
2. MVT-occupant: 688	2. Falls: 84
3. Poisoning: 277	3. Poisoning: 79

Table A-1 - Chelan

Chelan Non fatal injuries 1998-2002	**Chelan** Fatal injuries 1998-2002
1. Falls: 1057	1. Falls: 33
2. MVT- occupant: 150	2. MVT- occupant: 27
3. Poisoning: 78	3. Poisoning: 25

Table A-2 - Douglas

Douglas Non fatal injuries 1998-2002	**Douglas** Fatal injuries 1998-2002
1. Falls: 404	1. MVT- occupant: 28
2. MVT- occupant: 68	2. Falls: 13
3. Poisoning: 33	3. Poisoning: 13

Table A-3 - Grant

Grant Non fatal injuries 1998-2002	**Grant** Fatal injuries 1998-2002
1. Falls: 1002	1. MVT- occupant: 106
2. MVT- occupant: 281	2. Poisoning: 23
3. Poisoning: 102	3. Falls: 17

Table A-4 - Okanogan

Okanogan Non fatal injuries 1998-2002	**Okanogan** Fatal injuries 1998-2002
1. Falls: 813	1. MVT- occupant: 61
2. MVT- occupant: 189	2. Falls: 21
3. Poisoning: 64	3. Poisoning: 18

Specific county data highlight local county injury problems more accurately than aggregate Regional data can. For example, in Chelan County, Falls are the largest cause of both fatal and non-fatal injury. Whereas, Douglas, Grant and Okanogan Counties attribute the highest number of deaths to Motor Vehicle Traffic- Occupant crashes. Data indicates poisoning is the third highest cause of injury in all 4 counties. With local county data, we are better equipped to specifically address the individual needs of each county and to focus our efforts accordingly. This is reflected in the plan goals and objectives identified for specific injury prevention approaches.

The North Central Region has three (3) established injury prevention committees with representation from a variety of professional backgrounds. Currently, the most comprehensive representation is found within Chelan & Douglas counties, due to the formation of the Safe Kids Chapter. The primary focus of the injury prevention committee in Chelan & South Douglas counties is on injuries to children ages 0-14. This is a direct result of the focus of the national SAFE KIDS campaign. The Grant and Okanogan/ North Douglas County Injury Prevention Committees have focused on Risk Watch curriculum and TNTT. Both of these committees are currently reorganizing and utilizing assistance from the Regional Council to recruit new and diversified membership and participation that better represents their county communities. This reorganization may reflect in new program emphasis during the biennium. The current county-based injury prevention committees and membership include the following:

- Chelan & South Douglas County Injury Prevention Committee is a component of the Chelan-Douglas Safe Kids Chapter. This chapter includes; Central Washington Hospital, Wenatchee Police Department, Wenatchee Fire and Rescue, Airlift Northwest, LifeLine Ambulance, Chelan-Douglas Health District, Chelan-Douglas Together! For Drug Free Youth, Children's Home Society, Eastmont and Riverview Kiwanis, Columbia Valley Community Health, Douglas County Sheriff's office, Chelan Child Passenger Safety Team and North Central Region EMS Council.

- Grant County Injury Prevention Committee has representation from Samaritan Hospital, Big Bend Community College, EMS and the regional EMS office. This committee is currently working to involve school, law enforcement, Public Health and Child Passenger Safety representatives.

- Okanogan/ No. Douglas Injury Prevention Committee includes representatives from; Okanogan Fire Dist. #5 Ambulance, Brewster police department, Okanogan Public Health, Aero Methow Rescue, Twisp Fire and Rescue, Mid Valley Hospital and North Central Region EMS.

The developing regional network of prevention partners in and outside of the county injury prevention committees provides injury prevention education to residents of their communities. Many of the events and activities include participation of multiple agencies and groups to accomplish them. This includes pooling materials and manpower for things like multi-focused safety awareness events, safety checks, and safety presentations. The following list is a sample of events in which our regional partnerships, organizations, and committees collaborate to provide comprehensive injury prevention education

- Wenatchee Youth Day in the Park has over 1500 children who attend and receive safety education materials.
- Wenatchee Health Kids Day provides over 600 children with pedestrian and bicycle safety information and materials.
- Wenatchee Summer Day camps presentations reach over 500 children with the Risk Watch safety messages.
- Big Bend Community College Adult Basic Education/Work First and ESL classes provide the opportunity to teach impoverished adults Risk Watch safety messages.
- Wenatchee and Okanogan Senior Center audiences are utilized for Falls Prevention education.

- County and District Fairs provide the opportunity to distribute Motor Vehicle, Child Restraint and Fire Safety materials and education.
- School settings are utilized to educate elementary, middle and secondary students to safety and health education.
- Service Club presentations reinforce the education and partnerships of community members to injury prevention.
- Chelan-Douglas and Okanogan Public Health Home Visits provide avenues to present to low income and monolingual residents.
- Wenatchee Migrant Camp & Non-English speaking residents receive injury prevention safety messages in their native language.
- Okanogan County Food Handler classes are utilized to distribute gunlocks and firearm safety education.

The Regional Council's role in injury prevention is to provide assistance to existing groups, to support an injury prevention network, and assist with prevention resources. The North Central Region Injury Prevention Coordinator and 5 Regional Council board members are the region's representatives on each of the county injury prevention committees. Through this representation, the region is able to assist local communities in prevention efforts through resource identification and program enhancement. The Council also plays an active role in connecting groups around the region with similar injury prevention interests, which promotes region-wide collaboration and coordination between prevention partners.

Need Statement:
There are numerous injury prevention activities occurring throughout the region, however the Regional Council has identified several unmet system needs. These needs will be the focus of the Council's injury prevention efforts as part of the greater regional injury prevention community. The first need is for increased availability of injury prevention information and education for specific groups. Several groups with needs have been targeted for the biennium. They include: adult audiences that impact youth prevention activities, school aged children, non-English speaking populations, tribal communities, and seniors. Various approaches to providing injury prevention information and education are needed for these groups. Printed information and injury prevention education classes are both needed.

The second need is for a comprehensive injury prevention network in the North Central Region. A network is needed to provide an opportunity for the various injury prevention programs and people involved in injury prevention activities to connect, share information, identify ways to collaborate to maximize available funding and avoid inefficient duplication of projects, and have access to needed injury prevention project resources.

Goals:
Goal 1: Residents of North Central Region have access to injury prevention information and education with a special emphasis on county needs**.**

Objective 1:
Provide injury prevention education opportunities to adult education classes during school year 2005-06.

Strategy 1: *By December 2005, identify and communicate with community college Adult Basic Education and English as a Second Language directors at Wenatchee Valley College and North Campus Omak to offer Risk Watch curriculum to adult student classes.*

Strategy 2*: By December 2006, identify and communicate with daycare providers, parenting class providers and offer Risk Watch curriculum for parents.*

Objective 2:
Annually, provide injury prevention education to elementary and secondary educational institutions.

Strategy 1: *During the 2005-06 school year, present Risk Watch curriculum modules and TNTT programs to school age children in at least 2 schools in every county. Special emphasis placed on MVT-occupant safety to North Douglas, Grant and Okanogan counties, and Falls Prevention emphasis in Chelan and South Douglas counties. In recognition of poisoning as the third cause of injury across the region, the Risk Watch curriculum will address poisoning in all 3 counties.*
Strategy 2: *Identify 5 local community events annually throughout the region and provide injury prevention materials and handouts.*

Objective 3:
By December 2006, provide at least 500 non-English speaking residents with Injury Prevention education.

Strategy 1: *Coordinate with Public Health in counties in the region with large Spanish speaking populations to develop or provide existing injury prevention materials in Spanish for up to 400 recipients.*
Strategy 2: *Provide Russian/Ukraine population with injury prevention programs developed or available in Russian and presented by Russian speaking instructors within the school system to reach up to 100 students.*

Objective 4:
By December 2006, provide Colville Tribal community with Injury Prevention education.

Strategy 1: *Identify at least 5 Colville Tribal school and community prevention advocates to teach injury prevention programs.*
Strategy 2: *Hold TNTT/Risk Watch curriculum trainings for presenters.*
Strategy 3: *Approach Senior Center, Indian Public Health on identifying appropriate avenues for teaching opportunities and utilize trained presenters to provide up to 5 adult IPPE presentations during the biennium that are integrated into existing tribal events. Special emphasis will be placed on MVT-occupant and impaired driving prevention as county data reflects this need.*

Objective 5:
Contribute to the reduction in the number of Motor Vehicle Occupant injuries and/or deaths for youth in the region through at least 15 car seat check-up events annually.

Strategy 1: *Contact Child Passenger Safety Teams in North Central Region and identify appropriate avenues for public education with car seat checks.*

Objective 6:
Collaborate in the provision of materials for on-going motor vehicle safety education to school age children annually in each county of the region.

Strategy 1: *Provide Risk Watch MV Safety curriculum in up to 8 schools throughout NC Region.*

Objective 7:
Provide the senior population with at least 2 Falls Prevention presentations per county by September 2006.

Strategy 1: *Contact Public Health nurses, senior centers, and community centers to identify senior population and appropriate class schedule. Special emphasis for senior falls prevention will be given in Chelan county as data reflects this need.*

Goal 2:
A comprehensive regional Injury Prevention network is operating in the North Central region.

Objective 1:
Identify existing injury prevention focused committees, groups and programs operating in the counties of the NC region by June 2006.

Strategy 1: *Develop a resource catalog of all identified committees, groups and programs and make it available on line and disc.*
Strategy 2: *Develop a distribution plan for and process to update the resource catalog and execute distribution within the region by June 2006.*

Objective 2:
Expand local council representation on individual county injury prevention committees to ensure local council representation on over 50% of the existing committees by June 2007.

Strategy 1: *Present the opportunities for IP participation to the local and regional councils and assist in getting local council representation on identified committees.*
Strategy 2: *Develop injury prevention committee activities reporting system to capture the IP activities as reported by local council representatives and make the information available biannually to a minimum of Local Councils and the Regional Council.*
Strategy 3: *Develop an Injury Prevention Network sharing opportunity at the Regional Conference during the biennium and announce it to all NC Region IP Network participants.*

Projected costs:
Estimated system costs: Indeterminable
Regional Council cost: $75,000.00 for staff time and materials

Critical Barriers: None at this time

IV. Prehospital

A. Communication

System Status:

Table B. Dispatchers with EMD Training by County

County Name	Total # of Dispatchers in the County	EMD Training Program/s used in the County (if none indicate so)	# Dispatchers within the county who have completed EMD training from a course in column #3
Chelan/Douglas	29	Medical Priorities	29
Grant	15	King County CBD Program	15
Okanogan	13	Medical Priorities	13
Region Totals	57		**57**

The 911 system is well developed in North Central Region. The Region is fully served by E-911systems; no problems with citizen access have been identified. Though wireless communication is becoming more reliable technology is not fully developed enough to ensure region-wide E-911sevice. All North Central Region dispatchers have formal EMD training as shown in the table above. Bystander care is a component of their training and is provided during 911 calls. The impacts of greater cellular call volume and large-scale events, i.e., wild land fires, have, at times, overloaded the dispatch centers.

Interoperability is not well developed. Currently, dispatchers must use numerous different frequencies on multiple bands to dispatch emergency medical service providers. If the emergency call involves a tiered-response from a fire department aid vehicle, such as motor vehicle collisions or serious medical calls, additional frequencies have to be utilized causing further strain on the entire system. There are limited "mobile to mobile" or TAC radio channels currently available or assigned for dedicated use by emergency medical service providers. Communication and interoperability between EMS agencies and public safety agencies during a mutual aid response is often not possible or severely restricted. In addition, there is a significant lack of radio repeater availability for emergency medical providers. Communication with dispatch and with other responding units is impossible or very poor in many areas. This includes areas with a significant population of permanent residences and businesses, as well as traffic corridors, which have historically high incidences of motor vehicle collisions. These combined deficiencies in our current EMS communications system create poor coordination of resources, potentially unacceptable delays and reduced service levels for the delivery of EMS to the public.

Need Statement:

Many communication improvements are needed for emergency medical services in the North Central Region. We have identified issues related to interoperable communications, as a major system need. Single frequency dispatch is needed to relieve the burden on dispatchers to monitor multiple frequencies, while being more efficient in communicating with responders.

Goals

Goal 1:

An emergency medical communications system exists for the North Central Region that enables coordinated response to include; VHF trunking, multicasting of all primary EMS dispatch frequencies, simulcast dispatch of all EMS resources, and ensures that EMS agencies have the ability to clearly communicate with dispatch and other responding units via mobile or portable radio from any fixed permanent residence in the North Central Region. This system would assure the consistent and high quality delivery of emergency medical care to all citizens in need.

Objective 1:

Develop an EMS communications improvement plan with Chelan/Douglas and Okanogan counties in the North Central Region to (1) address and prioritize the specific radio infrastructure improvements needed to accomplish this goal and (2) to serve as a model for other communications plans in the region. This plan will be completed by the first quarter of 2006.

Strategy 1: *Establish a technical advisory committee through the two Local EMS Councils in Chelan/Douglas and Okanogan counties that is comprised of representatives from local EMS agencies and dispatch representatives working cooperatively to create this plan, by the third quarter of 2005.*

Strategy 2: *Seek funding sources through grants, coalitions, donations, etc… to finance the infrastructure and radio improvements that are needed to accomplish this plan.*

Strategy 3: *Provide representatives to attend any public or group meetings involving communications interoperability to solicit and encourage partnerships and coalitions and apply for any grant opportunities that may present themselves and ensure that the EMS communications plan does not conflict with any communications projects or plans being developed by other public agencies, such as law enforcement and fire.*

Strategy 4: *Utilize existing resources, infrastructure and shared radio sites whenever appropriate in order to make this system design as cost effective as possible.*

Strategy 5*: Coordinate planning processes with emergency response partners by giving partners the opportunity to review and respond to communications plan development during the regional planning process.*

Projected costs:

- **Estimated system costs:** $1,500,000.00
- **Regional Council cost:** $12,000.00 Absorbed by administrative overhead

Critical Barriers: A lack of funding to address our communications system needs.
A current lack of resources and technicians from the three communications centers who are able to dedicate to making timely improvements to this system. Many radio sites still require extensive development before additional radio equipment can be added.
A lack of funding available for and from EMS agencies to purchase the new portable and mobile radios which would be needed under the design of an improved communications system.

B. Medical Direction of Prehospital Providers

1. System Status:

In the North Central Region, the County MPDs provide leadership through their local county roles. The local EMS providers look upon the MPDs as the medical authority within their counties, as they provide direction and oversight under the authority of WAC. Their role is becoming more clearly defined. All three MPDs attend their respective local council meetings and are active in prehospital quality assurance in their counties of responsibility. All three MPDs are active in the regional training network as consultants to the OTEP program. Currently, only one MPD regularly attends the Regional Council meetings. None of the three MPDs regularly attend the regional trauma QI committee meetings and this is an area that will be addressed during the biennium.

The Chelan / Douglas County MPD is currently the MPD representative on the North Central Region EMS & Trauma Care Council. . He is the chair of the region's prehospital committee and is active in the development, review and implementation of regional PCPs.

2. Need Statement:

Further participation by the MPDs in the development of PCPs and COPs is a need that once filled would help continue the maturation of the EMS system in the North Central Region. Medical oversight and quality assurance in the rural setting is not easily accomplished as providers are not often exposed to the direction of the MPDs. Facilitating that interaction is a need that though identified may not be easily addressed. MPD involvement is critical to regional system level evaluation and improvement processes.

3. Goals:

Goal 1: The MPDs within the North Central Region EMS & Trauma Care Council are active in the development of system improvement by participating in PCP and COP review, development and implementation

Objective 1:
By March 2006 assist the chair of the Regional Council prehospital committee in implementing effective processes that the committee and MPDs can use in addressing regional PCP review and development.

Strategy 1*: Assist the chair of the prehospital committee in the facilitating of meetings held solely to address PCPs.*

Objective 2:
Assist MPDs in the facilitation of COP development at the Local Council level, so that all counties have had the opportunity to develop COPs by December 2006 for incorporation in to the next biennial plan.

Strategy 1: *Council staff will work with MPDs in 2005 to determine what level of support they need to provide to the COP process and develop an action plan.*
Strategy 2: *Assist the Local Councils in identifying areas that may be addressed by developing COPs. Provide COP examples that can act as a guide for development of local interest COPs.*

Goal 2:
EMS providers in the rural settings have multiple opportunities to interface with their respective MPDs.

Objective 1:
Integrate the MPD interface pilot from the 2005 regional conference into regional conferences during the 2005-07 bienniums.

Strategy 1: *Use responses from regional providers who participated in the regional MPD roundtable and workshop at the 2005 Emergency Medical & Acute Care Conference held in Wenatchee to help define ways to bring the providers and MPDs together regularly for interaction and dialogue.*

Objective 2:
Develop a schedule or plan to provide either learning opportunities or discussion /feedback opportunities between the rural EMS providers and the MPDs fixed locations convenient for both or by on-line communication by March 2007.

Strategy 1: *Schedule meetings and provide agendas that identify areas of concern that have been noted by the MPDs in their QA processes.*
Strategy 2: *Explore and identify opportunities for scheduled on-line opportunities for MPDs to interact with their providers.*

Projected costs:
Estimated system costs: Indeterminable
Regional Council cost: $5,000.00 Absorbed by administrative overhead

Critical Barriers: None at this time

C. Prehospital EMS and Trauma Services

1. System Status:

Table C-1. Prehospital Providers by County and Level – FY 03 - 05

County	FR	EMT	IV	AW	IV/AW	ILS	ILS/AW	PM	Totals
Chelan	17	216	41	0	1	0	0	24	**299**
Douglas	14	74	7	0	0	0	0	0	**95**
Grant	39	165	9	0	0	10	11	31	**265**
Okanogan	30	128	10	0	1	2	10	8	**189**
Totals	**100**	**583**	**67**	**0**	**2**	**12**	**21**	**63**	**848**

Table C-2. Prehospital Providers by County and Level – FY 06 - 08

County	FR	EMT	IV	AW	IV/AW	ILS	ILS/AW	PM	Totals
Chelan	21	213	36	0	1	0	0	28	**299**
Douglas	16	77	5	0	0	0	0	0	**98**
Grant	51	163	9	0	0	11	16	31	**281**
Okanogan	23	123	10	0	1	1	8	5	**171**
Totals	**111**	**576**	**60**	**0**	**2**	**12**	**24**	**64**	**849**

The tables compare the number and level of prehospital providers in the region, by county from the 2004-05 Plan and the current county number and levels of providers according to DOH provider database.

Throughout the North Central Region, we are fortunate to have a good working relationship with a large contingency of Public Safety entities that provide an invaluable service to the EMS system in the areas of: safety, scene command, extrication, search & rescue, water rescue, confined space rescue, fire suppression, Clandestine Drug Lab Removal, scene assistance, mass evacuation, emergency housing and additional manpower as needed. The following are examples of the Public Safety entities that assist our EMS system in the North Central Region:

Washington State Patrol
Local city police & fire departments
US Park Service
Military Air Rescue
County Emergency Management
County Sheriff Departments
US Forest Service
County Search & Rescue
Local Public Health Districts
County Fire Departments

During incidents that involve these groups, activities are coordinated through the lead agency for the incident. Without the assistance of these vital entities, our EMS system would be hard pressed to function as efficiently as it does.

The EMS workforce is a very important focus in the North Central Region. We believe that effective training and education is the key to maintaining the necessary EMS workforce. Based on a reassessment of training delivery in the region, the NC Regional Council is now managing the delivery of BLS OTEP from the Regional Council office. Through the process of implementing a regional OTEP program, we have recognized that the demands on providers have drastically changed over the last decade, and new training and education technology is now available to address the current demands for the delivery of training. It is important for us to find new ways to support providers, with these findings in mind.

We are seeing some new emerging problems with provider attrition rates. Because of erratic work schedules and many rural providers having to commute to nearby cities for work, the training could be next door to their house and they are still unable to attend. For this reason, we are looking closely at how to take advantage of current technology to supplement the community based training theory so that we can make training more convenient to providers and at the same time ultimately utilizing training funds more efficiently. With advances in technology and proven success in online training and training through other media such as Tele-health, it is the task of the Regional Training and Education Committee to develop a plan to utilize those resources to further maximize the efficiency of training funds.

2. Needs Statement:

Recruitment and retention of EMS providers is an ongoing issue within the region, particularly in the more rural areas. Due to changes in the dynamics of rural economies, populations, and jobs, many rural communities are facing new challenges regarding EMS personnel issues. Although we have not investigated the full extent of the problem, informal conversations with agency leaders regarding recruitment and retention of EMS providers have exposed concerns about increasing elderly population in rural communities creating a greater need for service, and at the same time a steady decline of farming as the main source of jobs in rural communities are forcing residence to commute or move to nearby urban areas for work.

The lack of communication and coordination between agencies within the North Central Region continues to be a concern and greatly contributes to inefficient use of training resources within individual agencies causing a greater reliance on funding from the North Central Region. There is often unnecessary duplication of courses and generally low attendance at courses, perpetuating high costs for meeting the needs of current providers and the infusion of new providers.

It is important that over the next 2 years we create a more solid infrastructure. This will ensure that training needs are better communicated; analyzed and constructed into a plan that ensures the most efficient use of training funds and instructor resources for individual agencies and the region alike. A solid infrastructure will allow us to enhance our ability to assess the effectiveness of current training, ensure that quality assurance issues related to training are addressed, and ensure that we implement an oversight program for maximizing instructor quality in the delivery of training.

The lack of local or regional data collection systems that could better the MPD QI process by examining data from existing EMS calls on an ongoing basis, creates an environment that makes it difficult to fully evaluate where the EMS system could be improved locally and regionally through training as well as in other areas.

One area of concern is the small number of providers who are actively involved in EMS education. Our region has 28 current SEI's, which is more than sufficient to facilitate the necessary amount of initial courses in the region. The larger concern is that currently there are 165 EMS evaluators in our region, most of who are not being used for EMS education. It is necessary that in creating an infrastructure that will maximize the efficiency of training funds and resources that we make provisions for the development and mentoring of these EMS evaluators in order to better utilize the resources available within the region and expand our pool of EMS educators.

Another area of concern is the issue of Skills Maintenance by providers. Statistics reported by the CDC, NHTSA and the FARS study show that injury related trauma has been declining over the last 20 years. There is also a trend towards less aggressive airway interventions with some chronic conditions, an increased awareness and use of DNR, No CPR and POLST for terminally ill patients as well as a shift in social acceptance of death in the terminally ill patient. These and many other factors translate into prehospital care shifting from it's original focus on trauma care and care of the acutely ill patient to a more heavy focus on care for patients who are dealing with issues related to chronic disease. The result of this is less exposure of providers to interventions such as IV therapy, intubations and other aggressive airway interventions and adjuncts, spinal immobilization, splinting, shock management, etc. The certification requirements of some of these skills have become increasingly difficult to maintain particularly for rural providers. This makes it all the more important to address these issues through training and education to ensure provider proficiency.

Both training aids and patient care equipment are needs in the region. These can be impacted by budgetary constraints, which often dictate the type of equipment and medications that agencies carry on their ambulances. The manufacturers of medical equipment are quickly designing equipment that allows patient care to be delivered more efficiently in the field. For agencies with limited budgets, it can take years after certain equipment becomes a standard of care for agencies to acquire it and routinely utilize it in the field. Because effective use of medical equipment requires training on the equipment, the same issues that impact the availability of patient care equipment also impact the availability of training aids.

Our most current understanding of training equipment needs in the North Central Region includes: trainers for medical equipment used in the field, audio-video equipment, supplies, manikins to practice patient care skills, and other similar needs.

For patient care equipment, the needs include cardiac monitoring and care equipment, airway monitoring and control equipment, trauma care equipment and supplies, basic patient care supplies especially in very rural areas, extrication tools and other patient care equipment.

3. Goals:

Goal 1:
Agencies within the North Central Region have an adequate number of well-trained personnel to provide service within their boundaries.

Objective 1:
Identify training deficiencies in personnel pool by March 2006.

Strategy 1: *Through an agency survey conducted by January 2006, identify where there are training deficiencies in certified personnel.*

Strategy 2: *Collate information by March 2006*

Objective 2:
Identify issues related to recruitment and retention and develop an action plan by the second quarter of 2006.

Strategy 1: *Through information gathered in training evaluations through 2005, gather information from providers that relate to retention issues*
Strategy 2: *From information gathered from the same agency survey, identify recruitment and retention issues by the end of 2005.*
Strategy 3: *Develop 3 ways to address recruitment and retention issues by the second quarter of 2006 and develop a plan to be integrated into the next biennial plan.*

Projected costs:

- **Estimated system costs:** Indeterminable
- **Regional Council cost:** $5,000.00 Absorbed by administrative overhead

Critical Barriers: Unforeseen

Goal 2:
Maximized efficiency of training and equipment funding throughout the region.

Objective 1:
Improve coordination and communication between instructors, agencies, and the local and regional councils, regarding training needs and opportunities throughout the region by the end of 2006.

Strategy 1*: By third quarter of 2006The Regional Council, through the Training and Education Committee, will define and implement policies for the coordination and communication of initial and ongoing training courses. Policies should ensure the following:*

- *Assessment of the need for training programs within the local council areas based on MPD QI, regional training program QA, and the needs of individual agencies*
- *Adequate distribution of courses through the local council areas in order to meet the needs identified in the assessment*
- *Fewer courses with more attendees, reducing overhead cost per course and lessening the burden to instructors.*
- *Communication of available training courses to a central coordination point in a timely manner so that notification can be given to agencies and providers throughout the region, ensuring maximum participation.*

Strategy 2: *The Regional Council office will expand the North Central Region website by the end of 2005 to include bi-monthly updates to communicate training opportunities throughout the region.*
Strategy 3: *Explore and create a better method of communication between EMS educators, individual agencies, local councils and the regional council in 2006*
Strategy 4: *Continue publication of the North Central Region EMS Training Network magazine on at least an annual basis to communicate pre-planned training opportunities to providers and to communicate sources of training information throughout the region*

Objective 2:
By January 2006 initiate and coordinate a program for the development and mentoring of available EMS evaluators in order to expand the pool of quality EMS educators in our region.

Strategy 1: *Coordinate and support initial training for EMS educators on an ongoing basis, including:*

- *DOT Educating EMS course (annually in this biennium)*
- *EMS Evaluator course (annually in each local council area in this biennium)*
- *Ongoing EMS educator workshops (twice a year)*

Strategy 2: *Continue to create resource material for instructors including updating the North Central Region EMS Training Network instructor resource manual each year, as well as creating a network capable of sharing resources between instructor through the North Central Region EMS website.*

Strategy 3: *Annual OTEP orientation for instructors who will be participating as EMS educators throughout the region.*

Strategy 4: *Implementation of an EMS educator-mentoring program by the end of 2005.*

- *To ensure that new instructors are mentored by experienced instructors, giving the region an opportunity to recruit future SEI's.*
- *To facilitate better communication between SEI's, to allow for effective peer review and State QA associated with the SEI recertification process.*

Objective 3:
Provide Council assistance for annual quality assurance of training programs throughout the region.

Strategy 1: *Request MPDs to review annually their quality assurance programs and recommend changes and/or additions to the Regional Training and Education Committee based on data from patient care outcomes and prehospital provider care reviews to ensure that current training is meeting the needs of our patients.*

Strategy 2: *Implement by Dec 2005 a program to continually evaluate the pertinence and effectiveness of training methods and topics to ensure that current training is meeting the needs of the providers. Utilizing data from written and practical evaluations of providers as well as course evaluations by providers, report annually on the status of training programs and instructor effectiveness.*

Objective 4:
Make regional based training available to all providers in the region by December 2006

Strategy 1: *By Aug 2005 establish a workgroup to develop or adopt an OTEP plan for ALS and ILS providers in the region that would begin by June 2006.*

Strategy 2: *The regional Training and Education committee will assess and report on the possibility of developing and or utilizing on-line training as an alternative to the didactic portion of OTEP and ongoing education for ALS/ILS/BLS providers by the end of 2005.*

Strategy 3: *Work with regional hospitals to develop a plan for implementation by the end of 2006 that would allow clinical education sessions to enhance skills maintenance especially for ILS/ALS providers who have declining abilities to maintain their skills in the field. The program would consist of:*

- *Policies for coordination of clinical education between the hospital and providers*
- *Training for hospital personnel who would be supervising or mentoring students during clinical rotations*

- *Clinical rotations that would include the following training opportunities:*
    - *Initial EMT patient contact hours for course completion*
    - *Continuing education in airway management including intubations for ILS/ALS providers*
    - *Continuing education in IV therapy for ILS/ALS providers*
    - *Post mortem clinical rotations*
    - *ICU/CCU clinical rotations*
    - *OBGYN clinical rotations*

Objective 5:

Annually identify training aid and medical equipment needed by providers to sustain the standard of care expected by patients.

Strategy 1: *Annually assess medical equipment needs and system costs throughout the region through a survey of the agencies (or other effective mechanism of inquiry) and review of PCP's and county protocols for patient care.*

Strategy 1: *Based on OTEP and ongoing training throughout the region, ensure that training equipment used to facilitate training is comparable to that which is being used in the field by providers, by annually assessing available training equipment to ensure it simulates the patient care environment. Determine the system cost for training equipment annually as well*

Projected costs:

- **Estimated system costs:** Indeterminable
- **Regional Council cost:** $150,000.00

Critical Barriers:

The current level of fragmentation and lack of communication between EMS educators, local councils, agencies, the regional council and individual providers

The creation and implementation of a solid infrastructure may have unforeseen barriers and costs, particularly in the area of information technology, and could simply lack funding to accomplish.

Cost of purchasing or developing an online learning platform and on-line education content for EMS.

Many rural areas within our region where the technology for providers to participate in online training does not exist, i.e., no broadband connection, no access to a computer, or lack of knowledge on how to operate a computer.

The lack of local or regional data collection systems that could better the MPD QI process by examining data from existing EMS calls on an ongoing basis, creates an environment that makes it difficult to fully evaluate where the EMS system could be improved locally and regionally through training.

Lack of funding to conduct instructor courses necessary to develop a broader pool of instructors.

Lack of funding to properly support agencies with instructor oversight at a level that would ensure quality in education throughout the region.

Barriers to clinical training

The willingness of regional hospitals to participate in clinical rotations

The cost of paying professionals to mentor EMS providers in the clinical setting

The decreasing number of opportunities for intubations in the hospital setting

D. Verified Aid and Ambulance Services:

1. System Status

Table D. Approved Min/Max numbers of Verified Trauma Services by Level and Type by County

County	Verified Service Type	State Approved - *Minimum number*	State Approved - *Maximum number*	Current Status (# Verified for each Service Type)
Chelan	Aid – BLS	4	6	5
	Aid –ILS	0	0	0
	Aid – ALS	0	0	0
	Amb –BLS	2	4	2
	Amb – ILS	0	0	0
	Amb - ALS	4	4	4
Douglas	Aid – BLS	1	5	1
	Aid –ILS	0	0	0
	Aid – ALS	0	0	0
	Amb –BLS	3	4	3
	Amb – ILS	0	0	0
	Amb - ALS	0	0	0
Grant	Aid – BLS	4	11	5
	Aid –ILS	0	0	0
	Aid – ALS	0	0	0
	Amb –BLS	4	8	5
	Amb – ILS	0	5	1
	Amb - ALS	1	4	4
Okanogan	Aid – BLS	1	9	3
	Aid –ILS	0	0	0
	Aid – ALS	0	0	0
	Amb –BLS	3	6	4
	Amb – ILS	0	2	0
	Amb - ALS	1	4	4

Determining the need and distribution of trauma verified services is a process begun and coordinated by the local EMS council. The DOH criteria for establishing need and distribution are used in developing recommendations for changes in distribution. In preparation for regional planning, the regional council solicits local county council information about local need for changes to verified services distribution.

At the beginning of this year, Okanogan Fire Dist. #5, Douglas County Fire Dist. #6 and Douglas County Fire Dist. #7 merged to become Douglas/Okanogan County Fire Dist. #15. The merged response areas can be found in the Okanogan County Table E.

The North Central Region EMS & Trauma Care Council is in the process of developing a way to display response area maps that can be interactive to allow for magnification capabilities, at this point only hard copy maps are available in the regional office. Trauma response area exploration to ensure all geography in the region is assigned will be combined with mapping project in the region.

Table E. Trauma Response Areas by County

County Name	Trauma Response Area #	Description of Trauma Response Area's Geographic Boundaries	Type of Verified Services in each area
Chelan	#1	The current boundaries of Chelan County Fire Dist. #1 proper – Maps and/or description available at Regional Office	A-1 F-1
	#2	The current boundaries of Chelan County Fire Dist. #3 proper – Maps and/or description available at Regional Office	A-1 F-1
	#3	The current boundaries of Chelan County Fire Dist. #4 proper – Maps and/or description available at Regional Office	A-1 F-1
	#4	The current boundaries of Chelan County Fire Dist. #6 proper – Maps and/or description available at Regional Office	A-1 D-1 F-3
	#5	The current boundaries of Chelan County Fire Dist. #8 proper – Maps and/or description available at Regional Office	D-1 F-2
	#6	The current boundaries of Chelan County PHD #2 proper – Maps and/or description available at Regional Office	F-1
	#7	The current boundaries of City limits of Cashmere proper. Map and/or description available at Regional Council Office.	D-1 F-2
	#8	The current boundaries of City limits of Wenatchee proper. Maps and/or description available at Regional Council Office	A-1 F-2
	#9	Town of Stehekin and surrounding wilderness area. Maps and/or description available at Regional Council Office.	F-1
Douglas	#1	The current boundaries of Douglas County Fire Dist. # 1 proper – Map and/or description available at Regional Council Office.	D-2 F-2
	#2	The current boundaries of Douglas County Fire Dist. # 2 proper – Map and/or description available at Regional Council Office.	A-2 F-2
	#3	The current boundaries of Douglas County Fire Dist. # 3 proper – Map and/or description available at Regional Council Office.	D-3
	#4	The current boundaries of Douglas County Fire Dist. # 4 proper – Map and/or description available at Regional Council Office.	D-2 F-3
	#5	The current boundaries of Douglas County Fire Dist. # 5 proper – Map and/or description available at Regional Council Office.	D-2 F-1
	#6	The current boundaries of City Limits of Bridgeport proper. Map and/or description available at Regional Council Office.	D-1
Grant	#1	The current boundaries of Grant County Fire Dist. # 3 proper – Map and/or description available at Regional Council Office.	A-1 D-2 F-2
	#2	The current boundaries of Grant County Fire Dist. # 4 proper – Map and/or description available at Regional Council Office.	A-1 E-1 F-1
	#3	The current boundaries of Grant County Fire Dist. # 5 proper – Map and/or description available at Regional Council Office.	D-1 E-1 F-1
	#4	The current boundaries of Grant County Fire Dist. # 6 proper – Map and/or description available at Regional Council Office.	D-3

Key: For each level the type and number should be indicated

Aid-BLS = A	Ambulance-BLS = D
Aid-ILS = B	Ambulance-ILS = E
Aid-ALS = C	Ambulance-ALS = F

County Name	Trauma Response Area #	Description of Trauma Response Area's Geographic Boundaries	Type of Verified Services in each area
Grant	#5	The current boundaries of Grant County Fire Dist. # 7 proper – Map and/or description available at Regional Council Office.	A-1 D-2 E-1 F-1
	#6	The current boundaries of Grant County Fire Dist. # 8 proper – Map and/or description available at Regional Council Office.	D-1
	#7	The current boundaries of Grant County Fire Dist. # 10 proper– Map and/or description available at Regional Council Office.	D-2
	#8	The current boundaries of Grant County Fire Dist. # 11 proper– Map and/or description available at Regional Council Office.	D-1
	#9	The current boundaries of Grant County Fire Dist. # 12 proper – Map and/or description available at Regional Council Office.	D-2 E-1 F-1
	#10	The current boundaries of Grant County Fire Dist. # 13 proper– Map and/or description available at Regional Council Office.	A-1 F-1
	#11	The current boundaries of Grant County Fire Dist. # 14 proper– Map and/or description available at Regional Council Office.	D-1
	#12	The current boundaries of Grant County Fire Dist. # 15 proper– Map and/or description available at Regional Council Office.	D-1 E-1 F-1
	#13	The current boundaries of City limits of Coulee City proper – Map and/or description available at Regional Council Office.	D-1
	#14	City limits of Ephrata proper – Map and/or description available at Regional Council Office.	F-1
	#15	The current boundaries of City limits of Grand Coulee proper – Map and/or description available at Regional Council Office.	D-1
	#16	The current boundaries of City of Moses Lake proper – Map and/or description available at Regional Council Office.	E-1 F-1
	#17	Port district boundaries, Grant County International Airport & Surrounding Industries – Map and/or description available at Regional Council Office.	A-1 E-1 F-1
Okanogan	#1	The current boundaries of Okanogan County Fire Dist. #1 proper. Map and/or description available at Regional Council Office.	D-1
	#2	The current boundaries of Okanogan County Fire Dist. #2 proper. Map and/or description available at Regional Council Office.	D-1
	#3	The current boundaries of Okanogan County Fire Dist. #3 proper. Map and/or description available at Regional Council Office.	D-1 F-1
	#4	The current boundaries of Okanogan County Fire Dist. #4 proper. Map and/or description available at Regional Council Office	D-1
	#5	The current boundaries of Douglas/Okanogan County Fire Dist. #15 proper. Map and/or description available at Regional Council Office.	E-1*
	#6	The current boundaries of Okanogan County Fire Dist. #6 proper. Map and/or description available at Regional Council Office.	A-1 F-1
	#7	The current boundaries of Okanogan County Fire Dist. #7 proper. Map and/or description available at Regional Council Office.	F-1
	#8	The current boundaries of Okanogan County Fire Dist. #8 proper. Map and/or description available at Regional Council Office.	A-1 D-1 F-1

Key: For each level the type and number should be indicated

Aid-BLS = A	Ambulance-BLS = D
Aid-ILS = B	Ambulance-ILS = E
Aid-ALS = C	Ambulance-ALS = F

County Name	Trauma Response Area #	Description of Trauma Response Area's Geographic Boundaries	Type of Verified Services in each area
Okanogan	#9	The current boundaries of Okanogan County Fire Dist. #9 proper. Map and/or description available at Regional Council Office.	A-1 F-1
	#10	The current boundaries of Okanogan County Fire Dist. #10 proper. Map and/or description available at Regional Council Office.	A-1 F-1
	#11	The current boundaries of Okanogan County Fire Dist. #11 proper. Map and/or description available at Regional Council Office.	D-1 F-1
	#12	The current boundaries of Okanogan County Fire Dist. #12 proper. Map and/or description available at Regional Council Office.	F-1
	#13	The current boundaries of Colville Tribal Reservation – Map and/or description available at Regional Council Office.	D-3

Key: For each level the type and number should be indicated

Aid-BLS = A	Ambulance-BLS = D
Aid-ILS = B	Ambulance-ILS = E
Aid-ALS = C	Ambulance-ALS = F

2. Need Statement:

The North Central Region EMS & Trauma Care Council has identified a need to define under-served areas in the Region and identify needed resources. Currently response maps demonstrate apparent gaps in areas throughout the region that may or may not represent true gaps in provider coverage. Analysis of response area coverage needs to be completed for planning improved resource distribution.

There are no recommended changes in distribution of identified services or minimum / maximum numbers for prehospital services in the biennial plan.

3. Goals:

Goal 1:
Under-served prehospital response areas and resource needs are clearly defined.

Objective 1:
Local Councils will review the current response area maps and identify under-served areas in their counties by September 2006 to determine if min/max numbers for verified aid and ambulance services require adjustment in the next biennial plan.

Strategy 1: *Provide regional council assistance with accurate identification of under-served areas.*
Strategy 2: *Conduct a workshop at a Local Council meeting to clarify the DOH criteria for identifying need and distribution and its application to making changes of the min/max verified services numbers.*

Projected costs:

- **Estimated system costs:** Indeterminable
- **Regional Council cost:** $6,000.00 Absorbed by administrative overhead

Critical Barriers: None at this time

E. Patient Care Procedures (PCPs)

PCPs, County Operating Procedures (COPs) and multi-county/inter-regional operations

1. System Status:

The North Central Region EMS & Trauma Care Council's Prehospital Committee is tasked with reviewing, revising and developing PCPs and COPs. Annually the Local EMS Councils and the Region's Prehospital Committee review, revise and update the COPs and PCPs respectively. Any recommended changes or additions are forwarded to the regional office for formal presentation to the regional council where, if adopted, are sent to the DOH for approval.

In the North Central Region attempts have been made to "regionalize" the medical protocols, however due to differing philosophies each county has MPD specific protocols to date therefore, there are no multi-county or interregional patient care protocols in place. PCPs are an attachment to the Plan.

2. Need Statement:

Progress on reviewing, revising and developing new PCPs and COPs has been slow in coming and is an area of need. The North Central Region's Prehospital committee has struggled with determining a direction to proceed. Due to the lack of reliable data, recommendations for systemic changes have little if any factual references to base the changes upon.

3. Goals:

Goal 1:

The North Central Region's PCPs & COPs are current, credible and are based on data that supports the efficacy of them.

Objective 1:

Develop, revise and update PCPs annually as required and encourage Local Councils to determine annually if there is a need to develop, revise and update their COPs

Strategy 1: *The North Central Region's PCP committee will meet periodically in the year to review the PCPs other regions have in place and determine if there is a need to develop PCPs for the North Central Region.*

Strategy 2: *At the Local Council meetings in the North Central Region, the Local Councils will be encouraged by the Regional Council leadership to form a committee to annually review COPs in place throughout the state to determine if there is any applicability to their respective counties.*

Projected costs:

Estimated system costs: Indeterminable

Regional Council cost: $6,000.00 Absorbed by administrative overhead

Critical Barriers: None at this time

V. Designated Trauma Care Services

A. Trauma Services

1. System Status

Table F. Approved Minimum/Maximum (Min/Max) numbers of Designated Trauma Care Services (General Acute Trauma Services)

LEVEL	STATE APPROVED		CURRENT STATUS
	MIN	MAX	
II	1	1	1
III	2	2	0
IV	4	4	6
V	3	3	3
IIP	1	1	0
IIIP	1	2	1

Table G. Approved Minimum/Maximum (Min/Max) numbers of Designated Rehabilitation Trauma Care Services

LEVEL	STATE APPROVED		CURRENT STATUS
	MIN	MAX	
II	1	1	1
III+			0

- *There are no restrictions on the number of Level III Rehab Services*

II	III-P		Central Washington Hospital	Wenatchee
IV			Coulee Community Hospital	Grand Coulee
IV			Lake Chelan Community Hospital	Chelan
IV			Mid-Valley Hospital	Omak
IV			North Valley Hospital	Tonasket
IV			Okanogan-Douglas District Hospital	Brewster
IV			Samaritan Healthcare	Moses Lake
V			Cascade Medical Center	Leavenworth
V			Columbia Basin Hospital	Ephrata
V			Quincy Valley Medical Center	Quincy
		II-R	Wenatchee Valley Hospital Rehabilitation Center	Wenatchee

The North Central Region has an established network of eleven designated trauma services. Rehabilitation for trauma is available within the region at our level II rehab facility.

The Region's Level II facility is centrally located within the region though patients requiring specialty trauma care that is unavailable locally (certain methods of orthopedic injury fixation, burn care, and spinal cord injury) are promptly transferred to either the level II facilities in Spokane or the level I facility in Seattle. The routine transport of critical patients to the Level I & II facilities that provide care outside the expertise of Central Washington Hospital has reduced the need for local specialty care.

There are limited gaps in the provision of trauma care services. Due to limited neurosurgeon availability at Central Washington Hospital, the transfer of patients to Level II facilities outside of the North Central Region is common. At this time the min/max numbers of designated trauma services have been met and patient care needs are being fulfilled. **As a result, there are no recommended changes to the identified minimum / maximum numbers in the biennial plan.**

2. Needs Statement:

The lack of reimbursement through the supplemental trauma reimbursement program in the last biennium and the changes to the Washington State Indigent Program has had an ongoing devastating effect on trauma facilities throughout the state and within this region. The cost of trauma patient care has increased in excess of reimbursement. While the Washington State trauma reimbursement program provides some relief, the constraints on availability of the trauma funds through that program, outside market insurance rates, and non-qualifying no-pay patients continue to negatively impact hospitals.

Physician coverage is an issue in most rural communities. Many rural and wilderness areas have difficulty recruiting physicians and/or physicians' assistants their small communities. These areas must share coverage by physicians with neighboring counties. The need has been identified that there are subspecialty physician shortages, though some agreements are in place with other regional designated trauma centers to fulfill those needs.

3. Goal:

Goal 1:

A system of designated trauma care services, and trauma rehabilitation services meets the North Central Region's the trauma patient care needs.

Objective 1:

Use the Regional QI Committee to monitor system effectiveness and report needs to the Regional Council for system planning at least semi-annually.

Strategy 1: *Maintain support to the North Central Regional QI Committee by attending meetings and providing applicable data as requested and as available.*

Projected costs:

Estimated system costs: Indeterminable

Regional Council cost: $6,000.00 Absorbed by administrative overhead

Critical Barriers: Unforeseen

VI. EMS and Trauma System Evaluation

A. Information Management

1. System Status:

The North Central Region EMS & Trauma Care Council endorses the WEMSIS project. The council's administrator is a member of the EMS Data TAC. In the North Central Region, many of the EMS provider agencies do not collect response data electronically, so there will be an extended transition period for them until they are able to provide electronic data to the state. Though all EMS agencies understand and acknowledge their role in submitting their run sheets and appropriate data to the receiving trauma facilities upon delivery of a patient, the completeness of that data is suspect. There has been no concerted effort to orchestrate a system to retrieve run data regionally or on a county basis from the communication centers within the region.

Trauma services in the North Central Region all participate in the State Trauma Registry by submitting data on their qualifying trauma patients. Trauma Registrars continue to participate in registry training as the need is identified.

2. Need Statement:

It has been identified that missing and/or incomplete data is a common occurrence when hospitals receive EMS agencies run sheets. This missing and/or incomplete data prevents the region from adequately addressing the system QA issue, because reliable accurate prehospital data is limited, leaving information unavailable about that part of the system. Further, no organized regional hospital effort has been made to seek run data from providers or from the communication centers in the region.

3. Goals:

Goal 1:
The region has adequate, reliable and accurate data in order to make system adjustments to improve EMS response and care.

Objective 1:
Utilize scheduled regional training for providers to emphasize the necessity of every EMS provider completing the response information needed by the receiving Trauma Facility and to provide training in report completion on trauma calls.

Strategy1: *Include information and training in classes during each training year.*
Strategy 2: *Ask the regional QA/QI Committee to monitor run form availability and report periodically to the Regional Council and MPDs*

Objective 2:
Develop processes by 2007 to acquire prehospital response data from the communication centers in the region to assist in identifying areas where improvement is needed.

Strategy1: *Meet with the directors or supervisors of the communication centers within the North Central Region to devise a plan to compile EMS run data that can be presented to both the Local Councils and the County MPDs for QA analysis.*
Strategy 2: *Involve the Regional QA/QI Committee in planning*

Projected costs:
Estimated system costs: Indeterminable
Regional Council cost: Absorbed by administrative overhead

Critical Barriers: Unforeseen

B. Quality Assurance

1. System Status:

Prehospital agencies determine their own internal QA/QI processes for EMS runs. Currently there is no consistent mechanism in place for prehospital agency QA interplay within the regional system. All three MPDs have county prehospital QA/QI programs that are in varying degrees of maturity. Currently there is no region-wide process for prehospital QA that crosses county lines.

The Regional QA & I program is currently primarily focused on the care of the patient at the hospital level. It is led by the Level II trauma service, which has new surgeon leadership and is in the process of looking at the existing model. An integrated regional prehospital / hospital approach to using regional data to look at the performance of the whole system has yet to be developed. MPDs are not currently actively involved in the Regional QA & I program. There is no process currently for the use of regional data to facilitate system changes.

2. Need Statement:

There is clearly a need for system evaluation and QA processes that will help define areas of strength and weaknesses within the North Central Region EMS and Trauma Care System. Though a regional QI committee exists in the North Central Region, their primary function has been to review designated trauma facility data. Though the regional QI plan states that monitoring compliance with the North Central Region EMS Patient Care Procedures is a function of the regional QI committee, no actual mechanism has been put it into place to accomplish that goal. One of the limiting factors is that EMS representation on the regional QI committee is as an invited guest and not as a member of the committee. The North Central Region EMS & Trauma Care Council's position is that membership on the committee is vital so that items of importance and interest can be formally brought to the committee to be addressed.
Prehospital care is a key element in the system and MPDs involvement is needed.

3. Goals:

Goal 1:
System evaluation and quality improvement is achieved through an active regional QA/QI program including prehospital and hospital members.

Objective 1:
Ensure that the regional prehospital QA/QI program identifies system weaknesses and inefficiencies in both prehospital and hospital sectors of the region by reaching a balanced prehospital and hospital representation and focus by 2007.

Strategy1:
Utilize the Level II trauma service leadership to identify interested stakeholders that can serve on the regional prehospital QA/QI committee that review comprehensive local and regional data to identify the need for system changes to improve efficiencies in the delivery of patient care.
Strategy 2:
Utilize the Level II trauma service leadership to enlist MPD involvement in the regional QA/QI Committee to ensure prehospital trauma care is evaluated effectively

Objective 2:
Continue to support the North Central Regional QI Committee in its desire to include EMS QA/QI issues in its ongoing bimonthly system evaluation process.

Strategy1:
Have EMS representatives attend all North Central Regional QI Committee meetings, bringing to the committee regional EMS data and PCP compliance issues for review and recommendations for system adjustments for improvement.

Projected costs:
Estimated system costs: Indeterminable
Regional Council cost: $6,000.00 Absorbed by administrative overhead

Critical Barriers: Unforeseen

VII. All Hazards Preparedness (natural, man made, & terrorism/WMD)

A. Prehospital Preparedness

1. System Status:

Within the North Central Region, tremendous progress has been made in the level of collaboration and cooperation with multiple partners to include; public health, emergency management, Homeland Security, hospitals, communication centers and others. These groups are now doing considerable planning together. Multiple drills and exercises have taken place throughout the region and EMS is an active partner in these drills.

The North Central Region EMS & Trauma Care Council's role in All Hazards planning has been driven by HRSA, CDC and ODP/FEMS grant funding. Though these funds do not come to the Regional Council for prehospital planning, hospital, public health and emergency management planning is being done with the North Central Region's staff participation. This fact alone will help drive prehospital planning to ensure that all plans are congruent with one another.

WMD preparedness is a fluid and moving target. Some information is known of about the level of preparedness in the region and some is not. The EMS and Trauma Care Plan will be updated with WMD preparedness information as it becomes available during the biennium.

WMD equipment for prehospital providers is limited at best and funding sources are less than reticent in providing the necessary funding. Equipment needs are being identified on an ongoing basis through existing groups working on preparedness and will be known during the biennium.

WMD awareness training is recognized as needed by EMS providers region-wide however because of the lack of a final determination as to which initial awareness class is the "recognized" one, providers are not sure of which course to take. This hesitancy is fueled by a fear that "multiple" awareness courses will have to be taken to satisfy all governing entities. The North Central Region EMS & Trauma Care Council's Training Network has implemented a WMD section of our OTEP plan to satisfy the DOH requirements of WMD training. The Regional Council is following the training issue and options and will be able to provide the status during the biennium by working with other preparedness partners.

The majority of North Central Region's provider agencies are signors on the North Central Region Mutual Aid Agreement, however it needs to be revised to meet any new requirements driven the emphasis on terrorism, WMD, and All Hazard incidents. This will be accomplished during the biennium.

The North Central Region EMS & Trauma Care Council's provider agencies will be encouraged to participate in the survey that will identify the needs for providing prehospital field burn care for 50 severely burned adult and pediatric patients, which will be completed prior to the implementation of this plan. The information will be incorporated into the Regional Plan at that time.

The extent of interoperability of general equipment, communication equipment, and various patient care directives is not fully known at this time. Interoperable of equipment, whether communications, medical, decontamination, MCI, etc., is a need that has been identified and is being addressed in many varying venues. Whether with communication centers, emergency

management, hospital and public health emergency preparedness meetings, the North Central Region EMS & Trauma Care Council is engaged in these meetings to assist in the facilitation of interoperability discussion and planning. Interoperability of various patient care guidelines hasn't been analyzed. Regional PCPs provide the best opportunity for any regionalized approach. Interoperability of elements of preparedness will be determined over the course of the biennium through existing committees and groups in the region and incorporated in to the Regional Plan.

2. Need Statement:

With the current emphasis and importance of All Hazard/Bioterrorism Preparedness and Response, it is imperative that the Region works closely with the healthcare facilities, emergency management, public health and others within the region to prioritize the needs of those entities and to assist them in further assessing the issues and needs in this area. Collaborative and cooperative planning between these disciplines is essential is preparing the EMS system to work efficiently with them. This approach will be used to address the need to provide updated information about WMD preparedness in the Plan within the biennium.

3. Goals:

Goal 1:

The North Central Region EMS response, to any MCI (multi-casualty incident) whether man made or natural, is preplanned and coordinated with those agencies that are also responders or are coordinators of those types of events.

Objective 1:

By July 2005, establish an ongoing forum for discussion with the region's emergency first responders (as identified by the Office of Domestic Preparedness) to identify the areas of greatest need. And to secure funding to assist in meeting those needs.

Strategy1: *During this biennium, bring together the North Central Region EMS & Trauma Care Council, regional healthcare facilities, public health, emergency management and others within the region to being a dialogue for the establishment of prioritizes, planning opportunities and how best to use available funding resources.*

Objective 2:

Identify the status of WMD preparedness for equipment, awareness training, written agreements and interoperability and incorporate the information into the current status of the All Hazards Preparedness in the Plan in accordance with the timeline of BT contracts and by the end of the biennium.

Strategy1. Utilize *existing groups and survey processes to get information to complete the objective*

Projected costs:

Estimated system costs: Indeterminable

Regional Council cost: $12,000.00 Absorbed by administrative overhead

Critical Barriers: None at this time

B. Hospital Preparedness

1. System Status:

Within the North Central Region, the level of collaboration between hospitals, public health and EMS is quite good. Through the function of the Region 7 Hospital Emergency Preparedness Committee and Region 7 Public Health Emergency Preparedness, the North Central Region EMS & Trauma Care Council is actively involved in collaborating with hospitals and public health is planning and preparing for disasters, mass casualty incidents, whether man-made or natural.

As an active and coordinating member of the Region 7 Hospital Emergency Preparedness Committee, the North Central Region EMS & Trauma Care Council coordinates, collaborates and leads multiple meetings with all of the hospitals in the region as well as the health district and departments throughout the region. Through the collaborative efforts of the Region 7 hospitals, the leadership of the Regional Control Hospital and the direction of the North Central Region EMS & Trauma Care Council staff, the Region 7 Hospital Emergency Preparedness and Response plan is in place at all hospitals in the region. With the direction of the North Central Region EMS & Trauma Care Council staff, the Region 7 Hospital Emergency Preparedness and Response Plan will be revisited for review, revision and re-implementation within calendar year 2005.

2. Need Statement:

Within the North Central Region there is a dire need for hospital-to-hospital radio communication capabilities. In the event of a multi-casualty incident that stresses the capabilities of any given hospital, it is imperative that communications can be "broadcast" regionally to alert hospitals that they may be called upon to assist in receiving patients either directly from the scene or in a facility-to-facility transfer.

3. Goals:

Goal 1:

A hospital-to-hospital radio communication system can reliably be use to alert the hospitals in the North Central Region of a need for inter-facility assistance or support.

Objective 1:

Identify a communication system model that can be utilized and placed in the Emergency Departments of all hospitals in the North Central Region that will be used as a regional alert system by the fourth quarter of 2005

Strategy1: *Within the Region 7 Hospital Preparedness and Response Committee and outside sources seek assistance in determining the cost of implementing a communication system for the all hospitals within the region. If agreeable with the region's hospitals, add and prioritize the system to the HRSA funding requests for the next funding cycle due 4th quarter 2005.*

Projected costs:
Estimated system costs: $150,000.00
Regional Council cost: $3,000.00 Absorbed by administrative overhead

Critical Barriers: Undetermined

EXHIBIT I - RESPONSE AREA MAPS

Too be added as soon as received from Region.

EXHIBIT II - North Central Region PCPs & COPs

North Central Region Patient Care Procedures (PCPs)

North Central Region EMS & Trauma Care Council

Patient Care Procedure
Dispatch of Agencies

Adopted by Regional Council: 04/04/2001
Approved by DOH: 02/13/2002
Revised:

I. PURPOSE

1. To provide timely & appropriate care to all emergency medical & trauma patients as identified in WAC 246-976-390.
2. To minimize "response time" in order to get appropriately trained EMS personnel to the scene as quickly as possible.
3. To establish uniform & appropriate dispatch of response agencies.
4. To utilize Criteria Based EMD trained dispatchers to identify potential Major Trauma incidents & activate the Trauma System by dispatching the appropriate services.

II. STANDARDS:

1. Licensed aid and/or licensed ambulance services shall be dispatched by trained dispatchers to all emergency medical incidents.
2. Verified aid and/or verified ambulance services shall be dispatched by trained dispatchers to all known injury incidents, which meet Trauma Registry Inclusion Criteria.
3. All Communication/Dispatch Centers charged with the responsibility of receiving calls for Emergency Medical Services shall develop or adopt an EMD (Emergency Medical Dispatch) Program that meets the Washington EMD Program and Implementation Guidelines.

III. PROCEDURE:

1. The nearest appropriate aid and/or ambulance service shall be dispatched per the above standards as identified in the North Central Regional EMS/Trauma Care response area maps, or as defined in local and/or county operating procedures.

IV. DEFINITION:

1. Per WAC 246-976-010, "response time" is defined as "the time from agency notification until the time the first EMS personnel arrive at the scene."
2. "Appropriate" is defined as "the verified or licensed service that normally responds within an identified service area."

V. QUALITY IMPROVEMENT

The Regional Quality Improvement Program shall develop a written plan for implementation to address issues of compliance with the above standards & procedures.

Adopted by Regional Council: 04/04/2001
Approved by DOH: 02/13/2002
Revised:

I. PURPOSE

1. To define prehospital response times for emergency medical & trauma incidents to urban, suburban, rural and wilderness areas in the North Central Region.
2. To define urban, suburban, rural and wilderness response areas.
3. To provide trauma patients with appropriate & timely care.

II. STANDARDS:

1. All verified ambulance & aid services shall respond to emergency medical & trauma incidents in a timely manner in accordance with WAC 246-976-390.
2. All licensed ambulance & aid services shall respond to emergency medical incidents in a timely manner.

III. PROCEDURE:

1. The Regional Council, with input from prehospital providers and Local Councils, shall identify response areas & times as urban, suburban, rural and wilderness.
2. Verified/licensed ambulance & verified/licensed aid services shall collect & submit documentation to ensure the following response times are met or exceeded as established by PCP, COP or WAC 246-976-390 & 430.

Aid Vehicle		Ambulance	
Urban	8 minutes	Urban	10 minutes
Suburban	15 minutes	Suburban	20 minutes
Rural	45 minutes	Rural	45 minutes
Wilderness	ASAP	Wilderness	ASAP

3. Verified aid & ambulance services shall provide documentation on major trauma cases to show the above response times are met 80% of the time.
4. County Operating Procedures must meet or exceed the above standards.
5. Verified/licensed ambulance & verified/licensed aid are encouraged to set the "Golden Hour" as a goal for wilderness response times.

IV. DEFINITION:

1. An agency response area or portion thereof:
   a. **Urban** - an incorporated area over 30,000; or an incorporated or unincorporated area of at least 10,000 & a population density over 2,000 per square mile.
   b. **Suburban** – an incorporated or unincorporated area with a population of 10,000 to 29,999, or any area with a population density of 1,000 to 2,000 per square mile.
   c. **Rural** - an incorporated or unincorporated area with total populations less than 10,000 or with a population density of less than 1,000 per square mile.

d. **Wilderness** - any rural area not readily accessible by public or private road.
e. **Agency response time** is defined as the time from agency notification until the time the first EMS personnel arrive at the scene. (This is defined in WAC and constitutes "activation time" plus "enroute time.")

V. QUALITY IMPROVEMENT:

1. The Regional Quality Improvement Program shall develop a written plan for implementation to address issues of compliance with the above standards & procedures.

Adopted by Regional Council: 04/04/01
Approved by DOH: 04/01/02
Revised:

I. PURPOSE

1. To ensure that emergency medical & trauma patients who live in an area that is serviced by two or more ambulance providers, which have the same level of licensure, receive the timeliest & highest level of care that is available.

II. STANDARDS:

1. If available, the highest-level "appropriately staffed" ambulance within a designated area shall be dispatched to emergency medical & trauma incidents.

III. PROCEDURE:

1. Except when "extraordinary circumstances" exist, the highest level "appropriately staffed" licensed ambulance shall respond to all emergency medical & trauma incidents.
2. When a licensed ambulance provider is unable to immediately respond an "appropriately staffed" ambulance to an emergency medical or trauma incident, and there exists another ambulance which is "appropriately staffed" and capable of responding to the incident in a timely manner, then the service that was originally dispatched shall transfer the call to the second ambulance for response.
3. This procedure shall only apply to emergency calls received through the county 911-dispatch center.

IV. DEFINITION:

1. **Extraordinary Circumstances** shall be defined as situations out of the usual when all available ambulances from local licensed ambulance providers are committed to calls for service.
2. **Appropriately Staffed** shall be defined as an ambulance which immediately initiates it's response to an emergency medical or trauma incident staffed with at least two crew members which are certified to a level that is commensurate with the standard of care that has been set in the local area. (i.e., Paramedic/EMT, ILS-EMT/EMT, EMT/EMT or EMT/1st Responder)
3. **Highest Level** shall be defined as the service within the response area that has the highest level of certified personnel available, at the time of the call.

V. QUALITY IMPROVEMENT:

1. The Regional Quality Improvement Program shall develop a written plan for implementation to address issues of compliance with the above standards & procedures.

Adopted by Regional Council: 04/04/2001
Approved by DOH: 02/13/2002
Revised:

PURPOSE:

1. To define who may initiate the request for on-scene emergency air medical services, and under what circumstances non-medical personnel may request on-scene air medical services.
2. To institute a program of continuous evaluation to determine the best utilization of air medical services in our region.

STANDARDS:

Early activation of air ambulance services should be initiated as soon as the medical condition of the patient and scene location/conditions would favor, by at least 10 minutes, air transport of the major trauma or critical medical patient.

PROCEDURE:

1. Air ambulance services should be used when it will reduce total out of hospital time for a major trauma patient by 10 minutes or more.
2. Air ambulance services may be used for medical and non-major trauma patients under special circumstance and only with clearance by medical control.
3. Prehospital personnel en route to the scene should make the request to place an air ambulance service on standby, or initiate a request for an on-scene response.
4. The call must be initiated through the appropriate medical emergency dispatching agency.
5. The helicopter communications staff will always give an approximate launch time, flight time and advise when lifted to the dispatchers requesting services.
6. The responding helicopter will make radio contact with the receiving hospital at, or shortly after liftoff from the scene.
7. An air ambulance that has been launched or placed on standby can only be cancelled by the highest level of transporting prehospital personnel dispatched to the scene.

DEFINITION:

1. **Standby:** Upon receiving the request, dispatch will notify the pilot and crew of the possible flight. The crew will respond to the aircraft and ensure they are in a flight ready status. The crew will then remain at or near the aircraft until such time as they are launched or released from the standby.
2. **Launch Time:** Launch time is the time the skids lift the helipad en route to the scene location.

QUALITY IMPROVEMENT:

1. A regional helicopter response report form for each flight or standby request, including cancelled flights, must be submitted to the QI Committee at the end of each calendar quarter. These will be reviewed, with local input, to develop a definition of the most appropriate circumstances for helicopter requests.

North Central Region EMS & Trauma Care Council

Patient Care Procedure
Identification of Major Trauma & Emergency Medical Patients

Adopted by Regional Council:	10/23/1998
Approved by DOH:	10/23/1998
Revised:	

I. PURPOSE

1. To implement regional policies and procedures for all emergency medical patients and all trauma patients who meet the criteria for trauma system activation as described in the Washington Prehospital Trauma Triage Procedures.

2. To ensure that all emergency medical patients are transported to the closest most appropriate facility in the shortest time possible.

3. To ensure that all major trauma patients are transported to the most appropriate facility capable of meeting the patient's need in accordance with WAC 246-976-370.

4. To allow the designated facility sufficient time to activate their emergency medical and/or trauma resuscitation team. (See WAC 246-976-550 (d).

II. STANDARDS:

1. Major trauma patients will be identified in the initial EMS field assessment using the most current State of Washington Prehospital Trauma Triage (Destination) Procedures as published by the Department of Health.

2. Major trauma patients will be identified by the region's prehospital services and hospitals for the purposes of state trauma registry inclusion using the trauma registry inclusion criteria as outlined in WAC 246-976-430.

3. Major trauma patients will be identified for the purposes of regional quality improvement as patients who meet the Trauma System Activation criteria of the most current version of the State of Washington Prehospital Triage Procedures, and patients who activate hospital resource teams and those who meet the hospital trauma patient registry criteria.

4. Patients not meeting the criteria to activate the trauma system will be transported to the closest most appropriate local facility as outlined in local procedures.

III. PROCEDURE:

1. The first certified EMS/TC provider to determine that a patient:
   a. Meets the trauma triage criteria and/or
   b. Presents with factors suggesting potential severe injury (in accordance with the Washington Prehospital Triage Procedure)
   c. Needs definitive medical care, should contact the nearest appropriate highest designated facility via the H.E.A.R. frequency (or other means as conditions dictate).

2. Radio contact with the receiving facility should be preceded with the phrase: "This is a major trauma or major heart alert."

3. The receiving facility shall be provided with the following information, as outlined in the Prehospital Destination Tool:

   a. Identification of EMS agency.
   b. Patient's age.
   c. Patient's chief complaint or problem.
   d. If injury, identification of the biomechanics and anatomy of the injury.
   e. Vital signs.
   f. Level of consciousness.
   g. Other factors that require consultation with medical control.
   h. Number of patients (if more than one).
   i. Amount of time it would take to transport the patient form scene to the nearest appropriate hospital (transport time).

4. When determined that a patient meets the trauma triage criteria, a Washington State Trauma Registry Band should be attached to the patient's wrist or ankle as soon as appropriate.

5. Whenever possible, ILS or ALS service should be dispatched to the scene by ground or air as appropriate. If unavailable, rendezvous will be arranged with the highest possible level of care.

6. While enroute to the receiving facility, the transporting agency shall provide complete report to the receiving hospital regarding the patient's status.

7. All information shall be documented on an appropriate medical incident report (MIR) form approved by the county medical program director.

IV. QUALITY IMPROVEMENT

The regional quality improvement program shall develop a written plan for implementation to address issues of compliance with the above standards and procedures.

Adopted by Regional Council:	10/23/1998
Approved by DOH:	10/23/1998
Revised:	

I. PURPOSE

1. To ensure that trauma patients receive treatment in facilities that have made a commitment to the provision of designated trauma service.

2. To define the referral resources for inter-facility transfers of patients requiring a higher level of care or transfer due to situational inability to provide care.

3. To recommend criteria for inter-facility transfer of major trauma patients from receiving facility to a higher level of care:

II. STANDARDS:

1. Written transfer agreements will be in place among all facilities in the region and tertiary care facilities commonly referred to which are out of the region.

2. All interfacility transfers shall be in compliance with current OBRA/COBRA regulations and consistent with RCW 70.170.060(02).

3. Level IV and V facilities will transfer the following adult and pediatric patients to level I or II facilities for post resuscitation care:

   Central Nervous System Injury Dx
   Head injury with any one of the following:
   - Open, penetrating, or depressed skull fracture
   - Severe coma (Glasgow Coma Score <10)
   - Deterioration in Coma Score of 2 or more points
   - Lateralizing signs

   Unstable spine
   Spinal cord injury (any level)
   Chest Injury Dx
   Suspected great vessel or cardiac injuries
   Major chest wall injury
   Patients who may require protracted ventilation
   Pelvis Injury Dx
   Pelvic ring disruption with shock requiring more than 5 units of blood transfusion
   Evidence of continued hemorrhage
   Compounded/open pelvic fracture or pelvic visceral injury

Multiple System Injury Dx
- Severe facial injury with head injury
- Chest injury with head injury
- Abdominal or pelvic injury with head injury
- Burns with head injury

Specialized Problems
- Burns > 20% BSA or involving airway
- Carbon monoxide poisoning
- Barotrauma

Secondary Deterioration (Late Sequelae)
- Patients requiring mechanical ventilation
- Sepsis

Organ system(s) failure (deterioration in CNS, cardiac, pulmonary, hepatic, renal, or coagulation systems)

4. All pediatric patients less than 15 years who are triage under Step I or II of the Prehospital triage tool, or are unstable after ED resuscitation or emergent observation intervention at hospital with general designations should be considered for immediate transfer to a level I designated pediatric trauma center.

5. For inter-facility transfer of critical major trauma patients, air or ground ALS transport is the standard. Trauma verified services shall be used for all inter-facility transfers of major trauma patients.

6. Transport of patients out of region shall be consistent with these standards.

III. PROCEDURE:

The General and Pediatric Trauma Transfer Criteria established by the Department of Health should be followed. Each designated trauma facility is required to develop procedures, protocols, and criteria defining which patients they keep or transfer.

The transferring facility must make arrangements for the appropriate level of care during transport.

The receiving facility must accept the transfer prior to the patient leaving the sending facility.

The receiving physician must accept the transfer prior to the patient leaving the sending facility.

All appropriate documentation must accompany the patient to the receiving facility.

The transferring physician's order shall be followed during transport as allowed by MPD protocols. Should the patient's condition change during transport, the transferring/sending physician, if readily available, should be contacted for further orders.

The receiving facility will be given the following information:

Brief history
Pertinent physical findings
Summary of treatment
Response to therapy and current condition

Further orders to transport personnel may be given by the receiving physician.

MPD approved Prehospital Protocols will be followed during transport, unless direct medical orders are given to the contrary.

Level IV and V trauma facilities should consider having trauma patients transferred by either ground or air according to the facility's interfacility transport plan.

Air transport should be considered for interfacility transfer in the North Central Region when transport by ground will be greater than 30 minutes.

IV. QUALITY IMPROVEMENT

The regional quality improvement program shall develop a written plan for implementation to address issues of compliance with the above standards and procedures.

Adopted by Regional Council:	10/23/1998
Approved by DOH:	10/23/1998
Revised:	

I. PURPOSE

1. To define implications for initiation of trauma center diversion (bypass) status in the Region.
2. To define the methods for notification of initiation of trauma center diversion.
3. To identify situations when a facility must consider diverting major trauma patients to another designated trauma center.

II. STANDARDS:

1. Designated trauma centers in the North Central Region will go on diversion for receiving major trauma patients based on the facilities' ability to provide initial resuscitation, diagnostic procedures, and operative intervention at the designated level of care.

2. Diversion will be categorized as partial or total based on the inability of the facility to manage specific types of major trauma or all major traumas at the time.

   Hospitals must consider diversion when:

   - Surgeon is unavailable
   - OR is unavailable
   - CT is down if Level II
   - ER unable to manage more major trauma
   - Beds are unavailable
   - Shortage of needed staff

3. Each designated trauma center will have a hospital approved policy to divert patient to other designated facilities on the ability to manage each patient at a particular time. A diversion log will be kept indicating the time of diversion and the reason for partial or total diversion.

4. All facilities initiating diversion must provide notification to other designated trauma centers in Region.

III. PROCEDURE:

1. Trauma centers will consider diverting major trauma patients based on the above standards.

2. A designated trauma center on partial or total diversion shall notify other designated trauma centers in the Region.

IV. QUALITY IMPROVEMENT

The regional quality improvement program shall develop a written plan for implementation to address issues of compliance with the above standards and procedures.

North Central Region County Operating Procedures (COPs)

Grant County EMS & Trauma Care Council

County Operating Procedure
Procedure #1-Tiered Response Rendezvous

Adopted by Grant County Council:
Recommended by Regional Council: 04/04/2001
Approved by DOH: 02/13/2002
Revised:

Purpose:

The Grant County Local Council encourages tiered response within the county. A tiered response system shall be used to provide an appropriate higher level of care anywhere in Grant County such care is readily available. Recognizing that there are areas where a tiered response is not appropriate because of time and distance, a rendezvous with an appropriate higher level of care will be requested, per Grant County EMS Protocols, anywhere in Grant County such a rendezvous is readily available.

Procedure for Tiered Response:

1. The nearest appropriately trained personnel and/or agency shall be dispatched as the primary ambulance.
2. If the severity of the incident is known and indicates the necessity of higher level of care, the dispatchers should also dispatch the next level of care immediately in those areas where the Grant County Local Council has identified a tiered response.
3. If the severity of the incident is unknown, the primary ambulance shall advise dispatchers to dispatch the next level of care as outlined in the Grant County Protocols. The primary ambulance will not delay transport to wait for the higher level of care, but will rendezvous instead.
4. When both agencies are on scene, the higher level personnel will assume care of the patient, and determine which ambulance transports.

Procedure for Rendezvous:

1. In areas where no tiered response has been identified, agencies should request a rendezvous with a higher level of care as outlined in the Grant County Protocols, if such care is readily available.
2. No agency, including ILS and ALS agencies, should delay transport of any patient to perform advanced skills that can be performed en route to the hospital.
3. When two agencies rendezvous, the higher level of care shall board the primary ambulance and assume responsibility for the care of the patient.

Quality Assurance:

The Grant County Quality Assurance Committee will analyze and make necessary changes in this procedure as may be indicated.

Adopted by Greater Wenatchee Council: May 15, 1996
Recommended by Regional Council: 1996
Approved by DOH: 1996
Revised:

Purpose:

1. To define the situations in which Advanced Life Support (ALS) agencies will be dispatched to emergency medical and major trauma incidents on U.S. 97 in Douglas County in the area between Sun Cove Estates and Twin W Orchards (milepost 224 to milepost 27).
2. To provide timely and appropriate care to all emergency medical and trauma patients.
3. To minimize "response time" in order to get appropriately trained EMS personnel to the scene as quickly as possible.
4. To establish uniformity and appropriate dispatch of ALS response agencies.

Standard:

1. An ALS agency from Chelan shall be automatically dispatched to all known emergency medical and major trauma incidents on the above-mentioned stretch of U.S. 97 in Douglas County.
2. All major trauma patients on this stretch of U.S. 97 shall be automatically transported to highest-level designated trauma center.
3. Emergency medical patients shall be transported to the facility of the patient's choice, if medically appropriate.

Procedure:

1. Waterville Ambulance shall be dispatched to all major trauma incidents on U. S. 97 to milepost 227. If ALS (paramedic) certified personnel are part of the response team, the dispatch center shall be so notified.
2. When the location of the emergency medical or major trauma incident is south of milepost 224 (entrance to Sun Cove Estates), an ALS agency out of Wenatchee shall be automatically dispatched to the scene.
3. When the location of the emergency medical or major trauma incident is north of milepost 224, the ALS agency out of Chelan shall be automatically dispatched to the scene.
4. All major trauma patients shall be transported to Central Washington Hospital in Wenatchee if within 30 minutes transport time. In areas where a designated trauma facility is beyond 30 minutes transport time by air or ground, the patient will be taken to the closest appropriate medical facility for stabilization and then transferred to an appropriate designated trauma facility.
5. Emergency medical patients shall be transported to the facility of the patient's choice, if medically appropriate. If the patient has a life threatening condition, the patient should be taken to the closest appropriate facility per regional patient care procedures.

Quality Improvement:

The Regional Quality Improvement Committee shall develop written plan for implementation to address issues of compliance with the above standards and procedures.

Adopted by Greater Wenatchee County Council: May 15, 1996
Recommended by Regional Council: 1996
Approved by DOH: 1996
Revised:

Purpose:

1. To define the situations in which Advanced Life Support (ALS) agencies will be dispatched to emergency medical and major trauma incidents in the Douglas County Fire District #4 service area currently served by Waterville Ambulance (milepost 138 to milepost 142.5 on U.S. 2, and milepost 213 north to milepost 224 on U.S. 97.
2. To provide timely and appropriate care to all emergency medical and trauma patients
3. To minimize "response time" in order to get appropriately trained EMS personnel to the scene as quickly as possible.
4. To establish uniformity and appropriate dispatch of ALS response agencies.

Standard:

1. An ALS agency from Wenatchee shall be automatically dispatched to all known emergency medical and major trauma incidents on the above-mentioned areas in Douglas County.
2. All major trauma patients on the above-mentioned areas of Douglas County shall be automatically transported to highest-level designated trauma center.
3. Emergency medical patients shall be transported to the facility of the patient's choice, if medically appropriate.

Procedure:

1. Waterville Ambulance shall be dispatched to all major trauma incidents in the above-mentioned area. If ALS (paramedic) certified personnel are part of the response team, the dispatch center shall be so notified.
2. An ALS agency out of Wenatchee shall automatically be dispatched to all emergency medical and major trauma incidents in the above-mentioned area.
3. All major trauma patients shall be transported to Central Washington Hospital in Wenatchee if within 30 minutes transport time. In areas where a designated trauma facility is beyond 30 minutes transport time by air or ground, the patient will be taken to the closest appropriate medical facility for stabilization and then transferred to an appropriate designated trauma facility.
4. Emergency medical patients shall be transported to the facility of the patient's choice, if medically appropriate. If the patient has a life threatening condition, the patient should be taken to the closest appropriate facility per regional patient care procedures.

Quality Improvement:

The Regional Quality Improvement Committee shall develop written plan for implementation to address issues of compliance with the above standards and procedures.